CLAIMS:

We claim:

1. A method for processing string input for a field in an interactive voice response (IVR) system, the method comprising the steps of:

identifying a sub-string pattern of characters within acceptable input for the field which is known to enjoy a high likelihood of recognition;

prompting an interacting user for string input limited to said sub-string pattern;

matching received sub-string input conforming to said sub-string pattern with data which conforms to said acceptable input to locate the string input for the field; and,

completing the field with said matched data.

2. The method of claim 1, wherein said identifying step comprises the step of identifying a sub-string pattern of characters within acceptable input for the field which is known to enjoy both a high likelihood of recognition and a high level of uniqueness.

3. The method of claim 1, wherein said identifying step comprises the step of identifying a sub-string pattern of numeric, alphabetic and alphanumeric characters within acceptable input for the field which is known to enjoy a high likelihood of recognition;

4. The method of claim 1, wherein said matching step comprises the step of querying a database for all records which have a specified field which contains said received sub-string input.

5. The method of claim 1, further comprising the step of pre-specifying which characters have a high likelihood of recognition.

6. The method of claim 1, further comprising the step of pre-specifying a likelihood of recognition value for each of said characters.

7. The method of claim 1, further comprising the step of, if said matching step produces a set of matching data, each data item in said set matching said sub-string input, disambiguating a desired data item from other data items in said set.

8. The method of claim 7, wherein said disambiguating step comprises the steps of:

selecting an additional field for processing,

additionally prompting said interacting user for additional input for said additional field;

matching received additional input for said additional prompting with data which conforms to said acceptable input to locate the string input for the field.

9. An interactive voice response (IVR) system comprising:

at least one form comprising at least one field which can be completed using input received through the IVR system;

a sub-string analyzer coupled to the IVR system; and,

a search processor coupled both to the IVR system and a database of data configured for searching based upon sub-strings which match sub-string patterns produced by said sub-string analyzer;

wherein said at least one field is completed using data matched in said database with said search processor using sub-string input provided through the IVR system.

10. The system of claim 9, further comprising disambiguation logic.

11. The system of claim 9, wherein said sub-string analyzer comprises a pre-configuration of computed recognition likelihoods for individual characters for use in forming said sub-string patterns.

12. A machine readable storage having stored thereon a computer program for processing string input for a field in an interactive voice response (IVR) system, the computer program comprising a routine set of instructions which when executed by a machine cause the machine to perform the steps of:

identifying a sub-string pattern of characters within acceptable input for the field which is known to enjoy a high likelihood of recognition;

prompting an interacting user for string input limited to said sub-string pattern;

matching received sub-string input conforming to said sub-string pattern with data which conforms to said acceptable input to locate the string input for the field; and,

completing the field with said matched data.

13. The machine readable storage of claim 12, wherein said identifying step comprises the step of identifying a sub-string pattern of characters within acceptable input for the field which is known to enjoy both a high likelihood of recognition and a high level of uniqueness.

14. The machine readable storage of claim 12, wherein said identifying step comprises the step of identifying a sub-string pattern of numeric, alphabetic and alphanumeric characters within acceptable input for the field which is known to enjoy a high likelihood of recognition;

15. The machine readable storage of claim 12, wherein said matching step comprises the step of querying a database for all records which have a specified field which contains said received sub-string input.

16. The machine readable storage of claim 12, further comprising the step of pre-specifying which characters have a high likelihood of recognition.

17. The machine readable storage of claim 12, further comprising the step of pre-specifying a likelihood of recognition value for each of said characters.

18. The machine readable storage of claim 12, further comprising the step of, if said matching step produces a set of matching data, each data item in said set matching said sub-string input, disambiguating a desired data item from other data items in said set.

19. The machine readable storage of claim 18, wherein said disambiguating step comprises the steps of:

selecting an additional field for processing,

additionally prompting said interacting user for additional input for said additional field;

matching received additional input for said additional prompting with data which conforms to said acceptable input to locate the string input for the field.